

( $p=0.001$ ) or stunting ( $p=0.021$ ) was higher among children who did not possess growth monitoring card. Prevalence of stunting was higher among children who did not routinely go to Posyandu within the previous 3 months ( $p=0.018$ ).

**Conclusion:** Proportion of mothers exposed to nutrition information and low coverage of growth monitoring program in rural area, contributes to the prevalence of underweight and stunting among underfive children.

**Keywords:** nutritional status, nutrition information exposure, growth monitoring, underfive children, Indonesia

OS-012

Oral

**Nutritional intervention on malnutrition in 3-6 years old rural children in Qazvin Province, Iran**

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**Abstract:** Malnutrition is one of the major causes of mortality and morbidity in children. Not only include acute effects on children's health, but also it has long-term effects on their cognitive development and economic growth in the society. Wasting (weight for height with  $Z<-1$ ) is one of the malnutrition indices in children. The aim of this study was to determine the effect of a cooked meal for 175 days on the anthropometric indices of weight, height and weight for height (wasting) of 3-6 years old children in all the rural nursery of Qazvin province, in Iran. In this interventional study, 2385 children (48.8% female and 51.2% male) were recruited. Data were collected by a census in 2010. The children were received a cooked meal based on 360  $\pm$  20 kcal energy, 17% protein, 53% carbohydrate and 30% fat per day for 175 days at lunch time. The anthropometric indices were collected before and after the intervention. The results were analyzed using paired t-test by SPSS V.16 software. Prevalence of wasting (mild and moderate) and (severe malnutrition) after intervention reduced from 14.2 and 0.95-12.6 and 0.5%, respectively ( $p < 0.05$ ). Receiving a cooked meal significantly decreased wasting (15.2-13.2%) in all children ( $p < 0.05$ ). Nutritional intervention with cooked meal for 175 days had significant reduction in wasting in all children.

**Keywords:** Nutritional Intervention, wasting, cooked meal, rural nursery, malnutrition

OS-013

Oral

**Assessing the Relationship between Food Insecurity & Weight Status of the Elderly applying FaCPS-FSSM Measurement Tool, Adopted for Iranian Elderly**

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**Background:** Food security as a social determinant of health is defined as "access by all people at all times to adequate food for an active and healthy life. In older adult years prevalence of Food Insecurity (FI) will further increase and underlying causes of FI will become broader. This situation by affecting total food consumption, food habits and choices, would impact weight status in the elderly. As there is no clear data reflecting the relationship between FI and weight status of the elderly, this study aims to investigate the mentioned relationship.

**Methods:** For the purpose of this study, 504 were selected through systematic cluster sampling method from 11 districts of Tehran (Districts 1, 3, 6, 7, 10, 12, 13, 16, 18, 20 and 21). FaCPS-FSSM FI measurement tool, which was previously

adjusted and validated for Iranian elders, has been used for examining the FI status. The content validity, internal consistency, criterion validity, construct validity, repeatability and reliability of FaCPS-FSSM FI measurement tool were examined during this study and for height, weight and BMI measurement we use National Institutes of Health (NIH) method.

**Results:** The results obtained through FaCPS-FSSM showed a high degree of food insecurity (59.3%) among the elderly; 29.4%, 19% and 10.9% of elders respectively suffer from mild, moderate and severe food insecurity. This study also showed that there is a high prevalence of overweight and obesity among the elderly and 79.4% of total participants were suffering from overweight and type1 and 2 obesity. The Results from multivariate analysis indicate that lack of food security especially in moderate FI is associated with a higher body weight status with the relationship strongest in females ( $p<0.0001$ ). Our results from logistic regression models suggested that in spite of severe FI, mild FI status is associated with increased risks of overweight and obesity among the elderly.

**Conclusion:** According to our findings, FI status could be a voluble predictor of weight status among the elderly. Considering that obesity in older ages could increase likelihood of chronic diseases like hypertension, coronary heart diseases and diabetes, special preventive health care services and FI eliminating national-wide programs should be taken into consideration to make appropriate quality of life and to enhance health conditions during older ages.

**Keywords:** Food Insecurity, Elderly, Weight Status, FaCPS-FSSM

OS-014

Oral

**Empirically-derived dietary patterns in relation to dyslipidemia among Iranian adults**

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**Background:** Inconsistent data have reported the relationship between dietary patterns and dyslipidemia in western countries, this investigation was conducted to determine the association between dietary patterns identified by factor analysis and dyslipidemia in a large sample of Iranian adults. **Methods:** This cross-sectional study was conducted on 1433 Iranian adults in the framework of Isfahan Healthy Heart Program (IHHP), a comprehensive community-based trial for CVD prevention, among a representative sample of Iranian adults. Usual dietary intakes were assessed with the use of a forty-eight-items food frequency questionnaire (FFQ). Fasting blood samples were taken for biochemical assessment. Factor analysis was used to identify dietary patterns.

**Result:** Three major dietary patterns were identified: western, semi healthy and healthy fat patterns. After adjustment for potential confounders, subjects in the upper quartiles of western dietary pattern were more likely to have high total cholesterol concentrations than those in the first quartile (OR: 2.07; 95% CI: 1.25-3.42). Individuals with greater adherence to western dietary pattern had greater odds of having high LDL-c levels compared with those in the lowest quartiles (2.53; 1.45-4.40). Semi healthy dietary pattern was not associated with CVD risk factors. The same finding was also resulted for the healthy fat dietary pattern.

**Conclusion:** Significant association was found between western dietary pattern and dyslipidemia among Iranian adults. Further prospective investigations are warranted to